

1998 Toxics Release Inventory

NORTH DAKOTA

Reported Releases and Waste Management Activities (in pounds)

	Original Industries	New Industries	Total
On-site Releases	2,301,759	9,630,257	11,932,016
Air Emissions	2,255,973	1,405,179	3,661,152
Surface Water Discharges	43,280	59,011	102,291
Underground Injection Class I Wells	0	0	0
Underground Injection Class II-V Wells	0	0	0
On-site Land Releases to RCRA Subtitle C Landfills	0	0	0
Other On-site Land Releases	2,506	8,166,067	8,168,573
Off-site Releases (Transfers Off-site to Disposal)*	147,721	11,302,469	11,450,190
Total On- and Off-site Releases	2,449,480	20,932,726	23,382,206
Recycled On-site	131,875	0	131,875
Recycled Off-site	683,398	2,500	685,898
Energy Recovery On-site	0	0	0
Energy Recovery Off-site	37,540	0	37,540
Treated On-site	4,581,936	832,000	5,413,936
Treated Off-site**	559,345	0	559,345
Quantity Released On- and Off-site***	2,467,835	21,396,839	23,864,674
Total Production-related Waste Managed	8,461,929	22,231,339	30,693,268
Total Non-production-related Waste Managed	12,700	15	12,715

Transfers Off-site for Further Waste Management/Disposal

Recycling	683,417	2,500	685,917
Energy Recovery	51,794	0	51,794
Treatment	4,458	0	4,458
Publicly Owned Treatment Works (POTWs)	587,717	0	587,717
Metals and Metal Compounds*	17	0	17
Non-metal TRI Chemicals**	587,700	0	587,700
Other Off-site Transfers****	0	0	0
Off-site Transfers to Disposal (not including metals to POTWs)	148,200	11,302,469	11,450,669
Total Transfers Off-site for Further Waste Management/Disposal	1,475,586	11,304,969	12,780,555

- Transfers to POTWs of metals and metal compounds are included in off-site releases. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site."

 ** Transfers to POTWs of non-metals are included in treated off-site waste management activity.
- *** Excludes non-production-related releases; e.g. releases due to catastrophic events or remedial actions.
- ****Transfers reported without a valid waste management code.

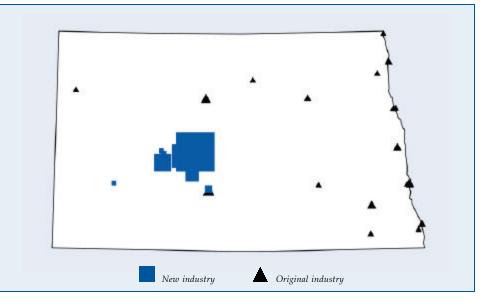
For More Information . . .

State Contact: Ray DeBoer (701) 328-8100 Fax: (701) 328-8181

EPA Regional Contact: Jovel Dhieux (303) 312-6447 Fax: (303) 312-6044

To obtain TRI data use assistance, call TRI User Support Service (TRI-US): (202) 260-1531

Fax: (202) 401-2347



The largest marker in the state map represents the largest facility for on-site releases in the state of North Dakota. All markers are proportionally-sized to represent the on-site releases at each facility within this state.

State/TRI Data

Population			638,244
Square Miles			68,994
Total Facilities			43
Total Forms			182
Form As			33
	Original Industries	Now Industries	Total

	Original Industries	New Industries	Total
National Rank for Total On- and Of	f-site Releases*		
Rank	47	29	39
Pounds	2,449,480	20,932,726	23,382,206
National Rank for Total On-site Rel	eases**		
Rank	47	39	44
Pounds	2,301,759	9,630,257	11,932,016
National Rank for Total Releases w	ithin State***		
Rank	47	29	39
Pounds	2,480,195	20,758,755	23,238,950
National Rank for Production-relate	d Waste Managed		
Rank	49	34	48
Pounds	8,461,929	22,231,339	30,693,268

- * Includes transfers out-of-state for disposal. Excludes transfer amounts sent for disposal to other TRI facilities reporting that amount released on-site.
- Includes amounts released at the facility. Excludes amounts transferred to other sites.
- *** Excludes transfers for disposal sent out-of-state or sent to other TRI facilities within the state reporting that amount released on-site.

NORTH DAKOTA

On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Original Industries)

			On-site Re	eleases		Off-site Releases		Off-si	sal	
			Surface		On-site	Transfers	Total	Transferred	Transferred	Transferred
		Air	Water	Underground	Releases to	Off-site to	Releases in	Into	Within	Out of
CAS		Emissions	Discharges	Injection	Land	Disposal*	the State* *	State	State	State
Number	Chemical	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds
110-54-3	n-Hexane	749,191	0	0	0	0	749,191	0	0	0
7664-41-7	Ammonia	610,371	15,211	0	750	45	626,377	0	0	45
100-42-5	Styrene	157,113	0	0	0	0	157,113	0	0	0
1330-20-7	Xylene (mixed isomers)	153,639	0	0	0	55	153,694	5	0	55
108-88-3	Toluene	125,144	0	0	1	0	125,145	1	0	0
_	Glycol ethers	89,431	0	0	0	0	89,431	1,500	0	0
7664-39-3	Hydrogen fluoride	69,150	0	0	0	0	69,150	0	0	0
115-07-1	Propylene	49,020	0	0	0	0	49,020	0	0	0
7439-96-5	Manganese	1,421	33	0	0	40,641	42,095	880	40,641	0
71-43-2	Benzene	39,180	0	0	0	1	39,181	0	0	1

^{*} Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

On-site and Off-site Releases for Top Ten Chemicals Ranked on Total Releases in the State (Seven New Industries)

			On-site Re	eleases		Off-site Releases		Off-sit	Off-site Transfers to Disposal			
			Surface		On-site	Transfers	Total	Transferred	Transferred	Transferred		
		Air	Water	Underground	Releases to	Off-site to	Releases in	Into	Within	Out of		
CAS		Emissions	Discharges	Injection	Land	Disposal*	the State**	State	State	State		
Number	Chemical	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds		
_	Barium compounds	36,330	23,005	0	6,269,000	8,959,748	15,288,083	0	8,809,748	150,000		
_	Manganese compounds	15,092	16,000	0	750,600	1,417,937	2,199,629	0	1,398,937	19,000		
7664-39-3	Hydrogen fluoride	563,000	0	0	0	0	563,000	0	0	0		
7647-01-0	Hydrochloric acid	407,600	0	0	0	0	407,600	0	0	0		
_	Arsenic compounds	6,697	0	0	139,820	224,297	370,814	0	223,757	540		
_	Chromium compounds	4,488	0	0	98,100	191,486	294,074	0	188,986	2,500		
_	Copper compounds	527	20,000	0	103,280	166,002	289,809	0	164,702	1,300		
7664-93-9	Sulfuric acid	266,860	0	0	0	0	266,860	0	0	0		
7440-39-3	Barium	2,506	0	0	240,000	3,800	246,306	0	3,800	0		
_	Antimony compounds	1,305	0	0	99,600	67,000	167,905	0	67,000	0		

^{*} Excludes amounts transferred to other TRI facilities in the state reporting that amount released on-site.

^{**} The chemical ranking is based on the amounts in this column.

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On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Release in the State (Original Industries)

				Off-site Releases (Transfers Off-site to Disposal)					
			Underground	Injection	On-site Rele	ases to Land			
	Air	Surface Water	Class I	Class II-V	RCRA Subtitle C	Other On-site Land	Total On-site	Transferred	Transferred
Facility, City, County	Emissions Pounds	Discharges Pounds	Wells Pounds	Wells Pounds	Landfills Pounds	Releases Pounds	Releases* Pounds	Within State Pounds	Out of State Pounds
Amoco Mandan Refy., Mandan, Morton	507,862	1,070	0	0	0	1,756	510,688	440	3,387
ADM Processing, Velva, Mc Henry	387,700	0	0	0	0	0	387,700	0	0
ADM Northern Sun Div., Enderlin, Ransom	267,800	0	0	0	0	0	267,800	0	0
American Crystal Sugar Co., Hillsboro, Traill	247,330	250	0	0	0	0	247,580	0	0
Minn-Dak Farmers Co-Op., Wahpeton, Richland	180,241	28,333	0	0	0	0	208,574	0	0
American Crystal Sugar Co., Drayton, Pembina	164,790	13,570	0	0	0	750	179,110	0	0
Nordic Fiberglass,Inc., Devils Lake, Ramsey	134,847	0	0	0	0	0	134,847	0	0
Case Corp., Fargo, Cass	85,307	57	0	0	0	0	85,364	1,127	0
Melroe Co., Gwinner, Sargent	74,195	0	0	0	0	0	74,195	33,739	0
TIC United Corp. Wil-Rich Div., Wahpeton, Richland	59,099	0	0	0	0	0	59,099	108,711	0

^{*}The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

On- and Off-site Releases for Top Ten Facilities Ranked on Total On-site Releases in the State (Seven New Industries)

	On-site Releases							Off-site Releases (Transfers Off-site to Disposal)	
			Underground	Injection	On-site Rele	ases to Land			
Facility, City, County	Air Emissions Pounds	Surface Water Discharges Pounds	Class I Wells Pounds	Class II-V Wells Pounds	RCRA Subtitle C Landfills Pounds	Other On-site Land Releases Pounds	Total On-site Releases* Pounds	Transferred Within State Pounds	Transferred Out of State Pounds
Great River Energy, Coal Creek Station, Underwood, Mc Lean	665,075	0	0	0	0	3,330,400	3,995,475	1,895,800	0
Leland Olds Station, Stanton, Mercer	142,701	5	0	0	0	2,077,420	2,220,126	803,300	173,971
Otter Tail Power Co. Coyote Station, Beulah, Mercer	159,919	0	0	0	0	1,333,740	1,493,659	302,282	0
Milton R Young Station, Center, Oliver	182,289	0	0	0	0	878,400	1,060,689	2,809,066	0
Great River Energy Stanton Station, Stanton, Mercer	78,505	59,000	0	0	0	182,400	319,905	656,600	0
R.M. Heskett Station, Mandan, Morton	26,506	6	0	0	0	267,000	293,512	4,450	0
Antelope Valley Station, Beulah, Mercer	149,412	0	0	0	0	0	149,412	4,657,000	0
Falkirk Mining Co., Underwood, Mc Lean	0	0	0	0	0	75,220	75,220	0	0
Coteau Properties Co. Freedom Mine, Beulah, Mercer	0	0	0	0	0	21,487	21,487	0	0
HCI Dyce Chemical Inc., Dickinson, Stark	772	0	0	0	0	0	772	0	0

^{*}The facility ranking is based on the amounts in this column; these quantities exclude transfers out of state.

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Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Original Industries)

Facility, City, County	Recycled On-site Pounds	Recycled Off-site Pounds	Energy Recovery On-site Pounds	Energy Recovery Off-site Pounds	Treated On-site Pounds	Treated Off-site Pounds	Quantity Released On- and Off-site* Pounds	Total Production- related Waste Managed Pounds	Total Non- Production- related Waste Managed Pounds
Amoco Mandan Refy., Mandan, Morton	131,000	2,483	0	308	1,461,000	365	516,770	2,111,926	2,700
ADM Processing, Velva, Mc Henry	0	0	0	0	0	0	400,414	400,414	0
ADM Northern Sun Div., Enderlin, Ransom	0	0	0	0	0	400	267,800	268,200	0
American Crystal Sugar Co., Hillsboro, Traill	0	0	0	0	247,080	0	247,080	494,160	0
Minn-Dak Farmers Co-Op., Wahpeton, Richland	0	0	0	0	2,676,831	0	208,574	2,885,405	0
American Crystal Sugar Co., Drayton, Pembina	0	0	0	0	149,038	0	177,610	326,648	0
TIC United Corp. Wil-Rich Div., Wahpeton, Richland	0	107,236	0	2,879	0	0	167,139	277,254	0
Nordic Fiberglass,Inc., Devils Lake, Ramsey	0	0	0	0	0	0	134,847	134,847	0
Case Corp., Fargo, Cass	0	435,000	0	6,020	0	117	86,472	527,609	0
Melroe Co., Gwinner, Sargent	0	0	0	0	11,402	73,945	74,286	159,633	0

^{*}The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.

Total Production-related Waste for Top Ten Facilities Ranked on Quantity Released On- and Off-site (Seven New Industries)

Facility, City, County	Recycled On-site Pounds	Recycled Off-site Pounds	Energy Recovery On-site Pounds	Energy Recovery Off-site Pounds	Treated On-site Pounds	Treated Off-site Pounds	Quantity Released On- and Off-site* Pounds	Total Production- related Waste Managed Pounds	Total Non- Production- related Waste Managed Pounds
Great River Energy, Coal Creek Station, Underwood, Mc Lean	0	0	0	0	0	0	6,377,000	6,377,000	15
Antelope Valley Station, Beulah, Mercer	0	0	0	0	0	0	4,796,100	4,796,100	0
Milton R Young Station, Center, Oliver	0	0	0	0	0	0	3,814,000	3,814,000	0
Leland Olds Station, Stanton, Mercer	0	0	0	0	0	0	3,229,000	3,229,000	0
Otter Tail Power Co. Coyote Station, Beulah, Mercer	0	0	0	0	619,000	0	1,805,660	2,424,660	0
Great River Energy Stanton Station, Stanton, Mercer	0	0	0	0	0	0	973,000	973,000	0
R.M. Heskett Station, Mandan, Morton	0	2,500	0	0	213,000	0	304,600	520,100	0
Falkirk Mining Co., Underwood, Mc Lean	0	0	0	0	0	0	75,220	75,220	0
Coteau Properties Co. Freedom Mine, Beulah, Mercer	0	0	0	0	0	0	21,487	21,487	0
HCI Dyce Chemical Inc., Dickinson, Stark	0	0	0	0	0	0	772	772	0

^{*}The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.